

ORIGINAL LOG BOOK OF THE "FISH HAWK"

UNITED STATES FISH COMMISSION

STATION RECORDS

Numbers 814 to 858

Copy

B.

U. S. Fish Commission  
Dredging Record.  
1880.

Locs. 814 -

Aug. 18 -

All bearings in this  
book are magnetic.

Air temperatures were  
taken by a Gas. Green,  
thermometer, supplied by  
the Navy Dept. and cor-  
rected to within .5 of a deg.  
It was placed in the  
open pilot house.

Trawl

TEMPERATURE RECORD.

Instrument used, *Requiem-Zambra.*

Current number of observation, *814.*

Date, *Aug. 18. 1880.*

Locality, *off Block Island.*

Bearings, *Block I., Lt., N. N. W, 7/8 W.*  
*18 miles.*

Time of day, *1 P.M.*; of tide,

State of sky, *b. c.*

Temperature of air, *72.*

" surface of water, *72. (N.Z. 4000 f.)*

x " at depth of *5* fathoms, *71° (10 f. 57) (20 f. 49.)*

" of bottom, *46. (N.Z. 42666)*

Depth, in fathoms, *27 1/2*

Nature of bottom, *sand and gravel.*

Direction of ~~surface current~~ *wind S. E.*

Force of ~~surface current~~ *wind 2.*

Direction of ~~bottom current~~ *Drift. S. W.*

Force of ~~bottom current~~ *Drift 1/4 mile*

Name of vessel, *Fish Hawk.*

To what service attached, *U. S. F. C.*

Name and rank of commanding officer, *J. L. Tanner.*

*lieut. U. S. N.*

Name and position of observer, *F. C. Van Vleet,*

*2nd D.*

x *Serials taken with N.Z. 42666.*

*Pecten tenuicostata*, few.  
*Asterias vulgaris*  
*Leptasterias compta*, abundant  
*Cribrella sanguinolenta*, few.  
*Buccinum undatum*, abdt.  
*Cyprina Islandica*, abdt.  
*Echinarachnius parva* (few)  
*Ophioglyphus Sarsii*, (one)  
*Strongylocentrotus Drob.*, few.  
*Limanda ferruginea*  
*Lophius piscatorius*.  
*Pseudorhombus oblongus*.  
*Phycis tenuis*.  
 " *chuss*.  
*Raja*. Sp.  
*Goarces anguillaris*.  
*Collus 18. spinosus*.  
*Merluccius bilinearis*.  
*Raja erinacea*?

Chester Lake Dredge,  
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra.*

Current number of observation, *815*

Date, *Aug. 18, 1880.*

Locality, *off Block I.*

Bearings, *Block I. Lt., N. W. by <sup>N.</sup>~~W.~~*  
*17 miles.*

Time of day, *2.15 P.m.*; of tide,

State of sky, *b. c.*

Temperature of air, *72*

" surface of water, *72. (n.z. 40007.*

x " at depth of *5* fathoms, *71° (108.56°, 20; 49°*

" of bottom, *48* *n.z. 42666.*

Depth, in fathoms, *29.*

Nature of bottom, *sand.*

Direction of surface current, *wind S.*

Force of surface current, *wind 2.*

Direction of bottom current, *Drift S. W.*

Force of bottom current, *Distance 1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

x. n.z. 42666.

815.

REMARKS.

fine sand very rich

*Liparis* sp. from *P. tenuicostatus*.  
*Merluccius bilinearis* juv.

*Dredge*

TEMPERATURE RECORD.

Instrument used, *Negretti-Zambra.*

Current number of observation, *816.*

Date, *Aug. 23.*

Locality, *Narragansett Bay.*

Bearings, *Brenton's Reef Lt. Ship.*  
*S. 3/4 S., 2 3/4 miles.*

Time of day, *10.25 am.* of tide,

State of sky, *clear.*

Temperature of air, *71.*

" surface of water, *69.* *N. 3. 4000 f.*

" at depth of fathoms,

" of bottom, *66.* *N. 3. 4266 f.*

Depth, in fathoms, *8 1/2*

Nature of bottom, *sand.*

Direction of ~~surface current~~, *wind S.*

Force of ~~surface current~~, *wind 2.*

Direction of ~~bottom current~~, *Drift S. E.*

Force of ~~bottom current~~, *Distance 1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,



816.

REMARKS.

fine sand, not very rich  
in life a variety of small  
shells and some Amphipods.  
*Echinocassius parma*, *neutro*.  
*Leumacia*.

*Dredge*  
TEMPERATURE RECORD.

Instrument used, *Negretti-Zambra*

Current number of observation, *817.*

Date, *Aug. 23.*

Locality, *Narragansett Bay.*

Bearings, *Brenton's Reef Lt. Ship*  
*S.  $\frac{1}{2}$  N. 3 miles.*

Time of day, *11 a.m.* ; of tide,

State of sky, *clear.*

Temperature of air, *72*

" surface of water, *68.* *N.Z. 40007.*

" at depth of fathoms,

" of bottom, *63.* *N.Z. 42666.*

Depth, in fathoms, *10.*

Nature of bottom, *sand.*

Direction of ~~surface current~~, *wind S.*

Force of ~~surface current~~, *wind 2.*

Direction of ~~bottom current~~, *Drift S. E.*

Force of ~~bottom current~~, *Drift  $\frac{1}{4}$  mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

817.

REMARKS.

<sup>broken</sup>  
Sand and shells

Same character as Co. T.

Echinorhynchus parva, many

*Bridge*  
TEMPERATURE RECORD.

Instrument used, *Requiti Zambra.*

Current number of observation, *818,*

Date, *Aug. 23, 1880.*

Locality, *Narragansett Bay.*

Bearings, *Brenton's Reef Lt. Ship.*

*S.  $1\frac{1}{2}$  N.,  $3\frac{1}{4}$  miles.*

Time of day, *11.20 am,* ; of tide,

State of sky, *clear.*

Temperature of air, *72.*

" surface of water, *68*

*N.Z. 40007.*

" at depth of fathoms,

" of bottom, *65*

*N.Z. 42666.*

Depth, in fathoms, *9 $\frac{1}{2}$*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind S.*

Force of ~~surface current~~ *wind 2.*

Direction of ~~bottom current~~ *Drift S. E.*

*Dist. Drift  $\frac{1}{4}$  mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

818

REMARKS.

Same as last.  
Nephrops. incisa  
Cumacea. abundant

# TEMPERATURE RECORD.

Instrument used, *Negretti's Zambra.*

Current number of observation, *819*

Date, *Aug. 23, 1880.*

Locality, *Narragansett Bay.*

Bearings, *S. End Hope Island, S. E.  
by E.  $\frac{1}{2}$  E.,  $\frac{1}{2}$  mile*

Time of day, *1 P.M.*; of tide,

State of sky, *Clear.*

Temperature of air, *74.*

" surface of water, *73.* *N. Z. 40007.*

" at depth of fathoms,

" of bottom, *70.* *N. Z. 42666.*

Depth, in fathoms, *6.*

Nature of bottom, *mud.*

Direction of ~~surface current~~ *wind*, *S. S. W.*

Force of ~~surface current~~ *wind*, *3.*

Direction of ~~bottom current~~ *drift*, *N. S. W.*

*Distance* ~~Force of bottom current~~,  *$\frac{1}{4}$  mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

- Simulus polyphemus*. ~~The same.~~  
 with *Addegera*, *Candida* many and  
*Eupagurus longicarpus*, large  
 " *pollicaris* many and large  
*Asterias*  
*Asterias Forbesi*  
*Callinectes*  
*Turris*  
*Styodonta* *Cantharus*  
*Loligo Pealii* med. and eggs  
*Libinia emarginata*  
*Chaetopterus pergami* tube  
*Molgula Marshalli*  
*Halysidium*  
*Stenotomus argyrops*  
*Pseudopleuronectes Americanus*  
*Lophopsetta maculata*  
*Prionotus carolinus*  
*Cynoscion regalis* juv.  
*Engraulis villosus*  
*Pseudorhombus dentatus*  
~~End of~~ N. J. 42666, tube protecting  
 inner tube broken at end, and  
 containing water. Protecting tube  
 to bulb, also containing a little  
 water in addition to mercury.  
 some of the mercury escaping.

*Trawl*  
TEMPERATURE RECORD.

Instrument used,

*Negretti gamma.*

Current number of observation,

*820*

Date,

*Aug. 23, 1880.*

Locality,

*Narragansett Bay.*

Bearings,

*S. end Hope Island*

*N. N. E., 1/4 mile.*

Time of day, *1.40 P.m.*; of tide,

State of sky,

*Clear.*

Temperature of air,

*76.*

"

surface of water,

*72.*

*N. J. 42666*

"

at depth of

fathoms,

"

of bottom,

*70*

*N. J. 40007.*

Depth, in fathoms,

*5 1/2*

Nature of bottom,

*muud.*

Direction of ~~surface current~~,

*wind S. S. W.*

Force of ~~surface current~~,

*wind 4*

Direction of ~~bottom current~~,

*Drift N. by S.*

Force of ~~bottom current~~,

*Distance 1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,



820.

REMARKS.

Similar to last, but a great  
deal of mud with small  
broken shells common in  
it.

*Equella empuia* 2 spec.

*Ascidia Forbesii*

*Callinectes hastatus*.

*Sicyoptus canaliculatus*

*Fulgur carica*

*Loxosteles bryozoa*

*Mucrona procera*

*Golden limulus*

*Hepatica incisa*

*Meckelia lurida*.

*Syngnathus fuscus*.

*Pseudopleuroxestis americanus*

*Onos cymbrium fusc.*

# TEMPERATURE RECORD.

Instrument used. *Negretti-Zambra.*

Current number of observation. *821.*

Date, *Aug. 23, 1880.*

Locality. *Narragansett Bay.*

Bearings, *S. End Hope I., N. by E.,  
1/2 mile*

Time of day, *2.15 P.M.*; of tide,

State of sky, *clear.*

Temperature of air, *78.*

" surface of water, *72*

*N. J. 42666*

" at depth of fathoms,

" of bottom, *70.*

*N. J. 40007.*

Depth, in fathoms, *5.*

Nature of bottom, *mud.*

Direction of ~~surface current~~, *wind S, S, W*

Force of ~~surface current~~, *wind +.*

Direction of ~~bottom current~~, *drift S. W.*

~~Force of bottom current~~, *Distance 1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

521.

REMARKS.

Similar to Cart,  
*Nephtys incisa*  
*Michelin Leveida*

*Raia*, sp. juv. one spec.  
*Pseudorhombus oblongus* juv.

Trawl,  
TEMPERATURE RECORD.

Instrument used, *Regretté-Zambra*  
Current number of observation, *822*,  
Date, *Aug., 23. 1880.*  
Locality, *Narragansett Bay.*  
Bearings, *S. end of Hope Island.*  
*N. E., 1/8 mile.*  
Time of day, *3 P.M.*, : of tide.  
State of sky, *clear.*  
Temperature of air, *78.*  
" surface of water, *71.* *N 3. 42666.*  
" at depth of fathoms,  
" of bottom, *70.* *N 3. 40007.*  
Depth, in fathoms, *4 1/2*  
Nature of bottom, *sand.*  
Direction of *wind* *S. S. W.*  
Force of *wind* *4.*  
Direction of *drift* *W.*  
*Distance* *1/4 mile.*  
~~Force of bottom current.~~  
Name of vessel,  
To what service attached,  
Name and rank of commanding officer,  
Name and position of observer,

# REMARKS.

mus, water.

*Squilla* *terrestris*, covering the  
*Calappa* *terrestris*.

*Alpheidae* *frankii* V. S.

*Neptys* *incisa*

*Nucula* *prostrata*

*Prionotus* *carolinus*.

*Lophopsetta* *maculata*.

*Stenotomus* *argyrops*.

*Cynoscion* *regalis*, juv.

*Tautoglabrus* *adspersus*.

*Physa* *terrestris*.

*Dredge*  
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra.*

Current number of observation, *823*

Date, *Aug. 24. 1880.*

Locality, *N. of Block I.*

Bearings, *North light, Block I.*

*N.  $\frac{1}{2}$  S.,  $1\frac{1}{2}$  miles.*

Time of day, *12.35 P.M.* of tide.

State of sky, *b. c.*

Temperature of air, *74.*

" surface of water, *65. N. 3. 46400.*

" at depth of *5* fathoms, *63° (1 of. 63°*

" of bottom, *60 N. 3. 40007.*

Depth, in fathoms, *15  $\frac{1}{2}$*

Nature of bottom, *sand,*

Direction of *wind* *N.*

Force of *wind* *3.  $\frac{1}{4}$  mile*

Direction of *drift* *N. N.*

Force of *distance*  *$\frac{1}{4}$  mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

*x N. 3. 40007*

## REMARKS.

*Amorpha canescens* V.  
*Psidium tunicostatum* Lag.  
*Leptostemon cuneifolius*  
*Urtica dioica* L.  
*Echinacea purpurea* (Mill.) J. R. & G.  
*Strophocarpus* *...*  
*...*  
*Cranganu bulgarica*  
*Sterea* *...*

824

# TEMPERATURE RECORD.

Instrument used, *Reguelli Zambra,*  
 Current number of observation, *824.*  
 Date, *Aug. 24, 1880.*  
 Locality, *North of Block I.*  
 Bearings, *North E. of Block I., S. N.,*  
*1/4 N., 1 mile.*  
 Time of day, *12.50 P.M.*; of tide,  
 State of sky, *Clear.*  
 Temperature of air, *74.*  
 " surface of water, *65.* *N. J. 46400.*  
 " at depth of *5* fathoms, *63° (10 f. 63°)*  
 " of bottom, *67* *N. J. 40007.*  
 Depth, in fathoms, *13.*  
 Nature of bottom, *Sand.*  
 Direction of ~~surface current~~ *wind* *N.*  
 Force of ~~surface current~~ *wind* *3.*  
 Direction of ~~bottom current~~ *drift* *N. N.*  
 Force of ~~bottom current~~ *distance* *1/4.*  
 Name of vessel,  
 To what service attached,  
 Name and rank of commanding officer,  
 Name and position of observer,

\*N. J. 40007.



824  
REMARKS.

Laminaria, My. 68. obelia  
Sertola tenuicollis  
Sertola tenuicollis

My. 68. obelia

My. 68. obelia

My. 68. obelia

My. 68. obelia

My. 68. obelia

My. 68. obelia

My. 68. obelia

My. 68. obelia

My. 68. obelia

My. 68. obelia

My. 68. obelia

My. 68. obelia

My. 68. obelia

# Oliver Trawl

## TEMPERATURE RECORD.

Instrument used, *Regretti-Zambra*  
 Current number of observation, *825.*  
 Date, *Aug. 24, 1880.*  
 Locality, *N. of Block Island.*  
 Bearings, *N. Light of Block I., N. S.*  
*N.  $\frac{3}{4}$  W.,  $1\frac{1}{4}$  miles.*  
 Time of day, *1.30 P.M.* : of tide.  
 State of sky, *clear.*  
 Temperature of air, *73.*  
 " surface of water, *67. N. 46400*  
 " at depth of *5* fathoms, *61. N 3,40007*  
 " of bottom, *60.* "  
 Depth, in fathoms, *13.*  
 Nature of bottom, *sand.*  
 Direction of ~~surface current~~ *wind* *N. S. W.*  
 Force of ~~surface current~~ *wind* *4.*  
 Direction of ~~bottom current~~ *drift* *N. W.*  
 Force of ~~bottom current~~ *distance*  *$\frac{1}{2}$  mile*  
 Name of vessel,  
 To what service attached,  
 Name and rank of commanding officer,  
 Name and position of observer,

and similar to last but  
 less in variety and bulk.  
*Echinarachnium* pauciflorum  
 up near the base.

*Stroph. dent. p. 100* (101).

*Rh. tenuis* (102).

*Scutell. hirs.*

*Stilp. Stroph. p. 100*

*Maria. fol. p. 100* (103).

*Cancer. hirs.*

*Eupagur. hirs.*

*Raia* (Sp.)

*Pseudorhynchus dentatus*,

*Asp. p. 100* (104).

*Pseudopleuronectes Americanus*

*Prionotus Carolinus*.

*Dredge.*  
TEMPERATURE RECORD.

Instrument used, *Negretti-Zambra.*  
Current number of observation, *826.*  
Date, *Aug. 24, 1880.*  
Locality, *North of Block. I.*  
Bearings, *North light of Block Island*  
*N. N. W.  $\frac{1}{2}$  W., 2  $\frac{1}{2}$  miles.*  
Time of day, *2.40 P.M.*; of tide,  
State of sky, *clear.*  
Temperature of air, *73.*  
" surface of water, *67° N. 3. 46400.*  
" at depth of *5* fathoms, *66. N 3. 40007*  
" of bottom, *57.* "  
Depth, in fathoms, *22.*  
Nature of bottom, *sand.*  
Direction of wind *S.*  
Force of wind *3.*  
Direction of drift *S. S. W.*  
Distance  *$\frac{1}{4}$  mile*  
~~Force of bottom current.~~  
Name of vessel,  
To what service attached,  
Name and rank of commanding officer,  
Name and position of observer,



# Blake Trawl.

## TEMPERATURE RECORD.

Instrument used, *Negati-zambra*  
Current number of observation, *827.*  
Date, *Aug. 24. 1880.*  
Locality, *North of Block I.*  
Bearings, *North light of Block I.,*  
*N. N. W.  $\frac{1}{2}$  W.  $2\frac{1}{2}$  miles.*  
Time of day, *3.05 P.M.*, of tide,  
State of sky, *Clear.*  
Temperature of air, *71.*  
" surface of water, *67° N. 3. 46400.*  
" at depth of *5* fathoms, *66. N. 3. 40007.*  
" of bottom, *57.* "  
Depth, in fathoms, *20  $\frac{1}{2}$*   
Nature of bottom, *Sand.*  
Direction of *wind S.*  
Force of *wind 3.*  
Direction of *Drift*  
*Distance*  
Force of bottom current.  
Name of vessel,  
To what service attached.  
Name and rank of commanding officer,  
Name and position of observer,

# REMARKS.

Two hauls were made and included under this number. The first brought up nothing. The second but very little, all the Invertebrates being contained in the above list. The reason assigned was that a sixty lb. ball was attached to end of bag, causing the runners to raise high in the water when the strain came upon them.

Physic. H. 1. 1. 1.  
H. 1. 1. 1. 1. 1.

Danby.

# TEMPERATURE RECORD.

Instrument used,

Regretté - Zambra.

Current number of observation,

828.

Date,

Aug. 25, 1880.

Locality,

Off North of Block Island.

Bearings,

North Lt. Block I., S. W.

by W.  $\frac{3}{4}$  N.,  $2\frac{1}{2}$  miles.

Time of day, 12.40 P.M. of tide,

State of sky,

Stormy.

Temperature of air,

70.

" surface of water,

66.

N. 3. 46400

" at depth of

fathoms,

" of bottom,

60.

N. 3. 40007.

Depth, in fathoms,

15.

Nature of bottom,

sand.

Direction of

wind,

N. N. E.

Force of surface current,

wind

6.

Direction of bottom current,

drift

E. N. E.

Distance

$\frac{1}{4}$  mile.

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,



## REMARKS.

But very little came up  
 sandy bottom.  
*Echinarachnius parma*.  
*Stereoderma uniseriale*.  
*Cirolana* ?  
*Nephtys*  
 Small sandy ascidian  
 (*Eugyra pilularis*??)  
 few small shells.

This was the beginning of  
 a two day's trip, the morning  
 opening with fair prospects,  
 but a North East wind struck  
 us, just about as the  
 above dredge went down  
 and we were obliged to  
 return to port.

F. M. S. J. R.  
TEMPERATURE RECORD.

Instrument used, *Requeti-Zambra.*

Current number of observation, *829.*

Date, *Aug. 27, 1880.*

Locality, *off Mouth of Sakonnet R.*

Bearings, *Cormorant Rock, N. W. by N.  
1/4 mile*

Time of day, *10.45 am.* of tide,

State of sky, *Clear.*

Temperature of air, *63,*

" surface of water, *66.* *N. 3. 42666.*

" at depth of fathoms,

" of bottom, *65.* *N. 3. 40007.*

Depth, in fathoms, *9.*

Name of bottom, *Gravel and stones.*

Direction of ~~surface current~~ *wind* *E.*

Force of ~~surface current~~ *wind* *2.*

Direction of ~~bottom current~~ *drift* *S. by E.*

*Distance*  
Force of ~~bottom current~~ *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

829.

## REMARKS.

Gravel, fine and coarse.  
 nearly barren  
 Red Mollusks  
*Urosalpinx* 1 or 2  
*Chama* *lucifera* few  
 Bay of Sea weeds, many  
*Asterias* *Forbesii*, 1  
*Crepidula* *argentea* 2 or 3  
*Ophiopoda* *alutacea*, 1.  
*Cancer* (small) 3 or 4.  
*Chiton* *Marmoreus*, 2 or 3.  
*Crepidula* *forbesii*,  
*Modiola* *modiolus*, 1.  
*Balanus* few

*Dredge*  
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*

Current number of observation, *830*,

Date, *Aug. 27, 1880.*

Locality, *Off Point of Sable, N. H.*

Bearings, *West Island, S. E. by E.*  
*1/2 E., 3/4 mile,*

Time of day, *11.15 am*; of tide,

State of sky, *clear.*

Temperature of air, *64,*

" surface of water, *66,* *N. 3. 42666,*

" at depth of fathoms,

" of bottom, *65.* *N. 3. 40007.*

Depth, in fathoms, *10 1/2*

Nature of bottom, *sand.*

Direction of *wind* *E.*  
~~surface current,~~

Force of *wind* *2,*  
~~surface current,~~

Direction of *drift* *N. E. 1/2 E.*  
~~bottom current,~~

*distance* *1/4 mile*  
~~Force of bottom current,~~

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

830.

REMARKS.

Sand and gravel, without  
red algae, not much darker  
than last

Many stones covered with  
barnacles and shells.

Small limpets common.

For shells

Ca. 100 m. from shore.

Eupagurus, Bernhardus, with shells.

Hydractinia.

For shells

21-392  
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*  
Current number of observation, *831.*  
Date, *Aug. 27. 1880.*  
Locality, *North End of Gould <sup>Island</sup> River.*  
Bearings, *S. N.  $\frac{1}{4}$  N. 350 yards.*

Time of day, *12.30 P.M.*, of tide,

State of sky, *clear.*

Temperature of air, *68.*

" surface of water, *71.* *N. 42666,*

" at depth of fathoms,

" of bottom, *71.* *N. 40007,*

Depth, in fathoms, *6.*

Nature of bottom, *black mud.*

Direction of ~~surface current~~ *wind* *S. E.,*

Force of ~~surface current~~ *wind* *1.*

Direction of ~~bottom current~~ *drift* *S.*

~~Force of bottom current~~ *distance*  *$\frac{1}{4}$  mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

831.

REMARKS.

A black. or dark brown, soft  
 & fetid mud with  
*Nucula proxima*, very abun.  
*Mulinia lateralis*,  
*Goldia limatula* &  
 Also some other species.

This same character of  
 bottom continued through  
 834, but the first one or  
 two hauls, had the  
 strongest smell. The  
 mud seemed to become  
 purer or clearer in character  
 down river and 835 had  
 no smell whatever, although  
 it was a genuine soft  
 mud.

Dredge.  
TEMPERATURE RECORD.

Instrument used, *Regretté & Zambra*  
Current number of observation, *832*  
Date, *Aug. 27, 1880.*  
Locality, *Sakonnet River.*  
Bearings, *N. End. of Goules Island.*  
*West, 150 yards.*  
Time of day, *12.45 P.m.* of tide.  
State of sky, *Clear.*  
Temperature of air, *70.*  
" surface of water, *71.* *N. 3. 42666.*  
" at depth of fathoms,  
" of bottom, *71.* *N. 3. 40007.*  
Depth, in fathoms, *9.*  
Nature of bottom, *Black mud,*  
*mud*  
Direction of ~~surface current~~, *S. E.,*  
*mud*  
Force of ~~surface current~~, *1,*  
*drift-*  
Direction of ~~bottom current~~, *S.*  
*Distance*  
Force of ~~bottom current~~, *1/4 mile.*  
Name of vessel,  
To what service attached,  
Name and rank of commanding officer,  
Name and position of observer,



832.

REMARKS.

Same as last.

Chester Lake Dredge  
TEMPERATURE RECORD.

Instrument used, *Regretté & Zambra*

Current number of observation, *833.*

Date, *Aug. 27, 1880.*

Locality, *Sakonnet River.*

Bearings, *South End of Gould Island  
100 yards.*

Time of day, *1 P.m.*, ; of tide.

State of sky, *clear*

Temperature of air, *70.*

" surface of water, *71.* *N. 3. 42666,*

" at depth of fathoms,

" of bottom, *71.* *N. 3. 40007.*

Depth, in fathoms, *6 1/2*

Nature of bottom, *mud.*

Direction of ~~surface current~~ *wind* *S. E.*

Force of ~~surface current~~ *wind* *1.*

Direction of ~~bottom current~~ *drift* *S.*

Force of ~~bottom current~~ *distance* *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

833.

REMARKS.

Same in character as last.

Charles K. K. K. K.  
TEMPERATURE RECORD.

Instrument used, *Requetti-Zambra*

Current number of observation, *834.*

Date, *Aug. 27. 1880.*

Locality, *Sakonnet River.*

Bearings, *McCurry's Point N. S. W.*

*3/4 mile.*

Time of day, *1.30 P.M.*; of tide,

State of sky, *Clear*

Temperature of air, *63.*

" surface of water, *73.* *N. 3. 42666.*

" at depth of fathoms,

" of bottom, *71.* *N. 3. 40007.*

Depth, in fathoms, *11.*

Nature of bottom, *mud.*

Direction of wind, *E.*

Force of wind, *2.*

Direction of trip, *N. by E.*

Distance *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

834.

## REMARKS.

*Lam. ar. lat.*  
*Scab. n. lat. 1 number of*  
*M. n. p. n. lat. 1 number of*  
*Cephal. p. n. lat. 1 number of*  
*G. n. lat. 1 number of*  
*L. n. lat. 1 number of*  
*S. n. lat. 1 number of*  
*L. n. lat. 1 number of*  
*M. n. lat. 1 number of*  
*N. n. lat. 1 number of*  
*C. n. lat. 1 number of*  
*E. n. lat. 1 number of*  
*C. n. lat. 1 number of*  
*M. n. lat. 1 number of*

Charles Robert Dwyer

TEMPERATURE RECORD.

Instrument used, *Negretti-Zambra*

Current number of observation, *835.*

Date, *Aug. 27, 1880.*

Locality, *Sakonnet River.*

Bearings, *McCurry's Point N.  $\frac{1}{4}$  E.*  
 *$1\frac{1}{4}$  miles.*

Time of day, *1.50 P.m.*; of tide,

State of sky, *Clear.*

Temperature of air, *68.*

" surface of water, *73.* *N. 3. 42666.*

" at depth of fathoms,

" of bottom, *71.* *N. 3. 40007.*

Depth, in fathoms, *3  $\frac{1}{2}$*

Nature of bottom, *mud and shells.*

Direction of ~~surface current~~ *wind*, *S. E.*

Force of ~~surface current~~ *wind*, *2.*

Direction of ~~bottom current~~ *drift*, *N.*

~~Force of bottom current~~ *distance*,  *$\frac{1}{4}$  mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

## REMARKS.

REMARKS.  
soft mud, broken and dead shells.

~~London~~ at Great number

[illegible]

After 1000 hours, the temperature of the

*C. pinnatifida*, *cinerea*

glabra. Deaf, and more or less

30 pages, mostly blank, some with faint markings.

with <sup>the</sup> incrusting bryozoa

*Sibinia caudiculata*

# *Chester Lake Bridge.*

## TEMPERATURE RECORD.

Instrument used, *Regretté-Zambra*  
 Current number of observation, *836.*  
 Date, *Aug. 27, 1880.*  
 Locality, *Lakonnet River.*  
 Bearings, *Black Point, N. 1/4 N.,*  
*1/2 mile*  
 Time of day, *2.25 P.M.*; of tide,  
 State of sky, *Clear.*  
 Temperature of air, *66.*  
 .. surface of water, *71.* *N. 3. 42666.*  
 .. at depth of fathoms,  
 .. of bottom, *71.* *N. 3. 40007.*  
 Depth, in fathoms, *5.*  
 Nature of bottom, *sand.*  
 Direction of ~~surface current~~, *wind S. S. E.*  
 Force of ~~surface current~~, *wind 2*  
 Direction of ~~bottom current~~, *drift S. S. W.*  
~~Force of bottom current.~~ *Distance 1/4 mile*  
 Name of vessel,  
 To what service attached,  
 Name and rank of commanding officer,  
 Name and position of observer,



836

REMARKS.

Sand, but very little bottom  
material came up.

*Mytilus* sp. 1000

*Mytilus* sp. 1000

*Mytilus* sp. 1000

*Mytilus* sp. 1000

*Mytilus* sp. 1000

*Mytilus* sp. 1000

*Mytilus* sp. 1000

*Mytilus* sp. 1000

*Mytilus* sp. 1000

*Mytilus* sp. 1000

*Mytilus* sp. 1000

Trawl

TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra.*

Current number of observation, *837.*

Date, *Aug. 27, 1880.*

Locality, *Lakounet River.*

Bearings, *Black Point N. W. by W.*

*1/2 W., 1/2 mile*

Time of day, *2.45 P.M.*; of tide,

State of sky, *Clear.*

Temperature of air, *69.*

" surface of water, *71.* *N. 3. 42666.*

" at depth of fathoms,

" of bottom, *71.* *N. 3. 40007.*

Depth, in fathoms, *5.*

Nature of bottom, *sand.*

Direction of ~~surface current~~ <sup>*wind*</sup>, *S. S. E.*

Force of ~~surface current~~ <sup>*wind*</sup>, *2.*

Direction of ~~bottom current~~ <sup>*drift*</sup>, *S. by E.*

Force of ~~bottom current~~ <sup>*distance*</sup>, *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

- Libinia emarginata*, many small  
*Charybdis* ? many  
*Alpheidae*, ocellatus many  
*Neomysis duplicata* many  
*Galathea* ca. 100, many  
*Squilla* canaliculatus "  
*Libinia* ? 2,  
*Euphausia* ?  
*Callinectes* ?  
*Libinia* ?  
*Asteria* ?  
*Parasquilla* a 50, many  
*Callinectes* maculata  
*Cynoscion* regalis, few. Numerous  
*Callinectes* ?  
*Portunus* ?  
*Pseudosquilla* ?  
*Pseudosquilla* ?  
" oblongus  
*Callinectes* ?  
" ?  
*Radia* ?  
*Mentaculus* ?  
*Squilla* ?

Trawl  
TEMPERATURE RECORD.

Instrument used, *Regatta Ombra*  
Current number of observation, *838.*  
Date, *Aug. 27. 1880.*  
Locality, *Lakounet River.*  
Bearings, *Wood's Castle N. by N.,*  
*1 mile.*  
Time of day, *3.15 P.M.*, of tide,  
State of sky, *clear.*  
Temperature of air, *66.*  
" surface of water, *70* *N. 3. 42666.*  
" at depth of fathoms,  
" of bottom, *68.* *N. 3. 40007.*  
Depth, in fathoms, *5 1/2.*  
Nature of bottom, *sand.*  
Direction of ~~surface current~~, *wind S. S. E.*  
Force of ~~surface current~~, *wind 2.*  
Direction of ~~bottom current~~, *drift S. by E.*  
Force of ~~bottom current~~, *drift 1/4 mile.*  
Name of vessel,  
To what service attached,  
Name and rank of commanding officer,  
Name and position of observer,

## REMARKS.

Large quantities of fish, the  
mostly, *Mugil* sp. *Sole* sp. some  
*Gobius* sp. *Squilla* sp. caught  
in the bay.

Very little material

*Dicotyphus canaliculatus*

*Bugula turrita* (much)

*Polysiphonia ocellata* (very small)

*Crepidula plana*.

*Epinarachnius panna*, in

*Squilla canaliculata*

*Eupagurus pollicatus*, many

*Diogenes* sp. *Cantharus*

*Chitichthys turgidus* (one)

*Alpheidae* *Carolinus*

*Raja erinacea*

*Pseudorhombus dentatus*,

*Stenotomus argyrops*

*Caprellidae* *maculata*

*Dredge*  
TEMPERATURE RECORD.

Instrument used, *Regatta - Jambra*

Current number of observation, *839.*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay*

Bearings, *Dumplings N. N.  $\frac{1}{2}$  E. N.*  
*300 yards.*

Time of day, *9.50* ; of tide,

State of sky, *b.c.*

Temperature of air, *67.*

" surface of water, *67.* *N. J. 42 666.*

*N. J. 40007* " at depth of *5* fathoms, *62° (10 f. 65°*

" of bottom, *61.* *N. J. 40007.*

Depth, in fathoms, *27  $\frac{1}{2}$*

Nature of bottom, *gravel*

Direction of ~~surface current~~ *wind* *N. N. E.*

Force of ~~surface current~~ *wind* *2*

Direction of ~~bottom current~~ *drift* *S. N.*

*dist* "  *$\frac{1}{4}$  mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

839,

REMARKS.

Land ... rich in life.  
 Large quantities of Laminaria  
 and other seaweeds,  
 with Obelia dichotoma.  
 ...

Cancer borealis? young  
 ...  
 Puerulus limula  
 ... stones  
 ...  
 ...  
 ... borealis.  
 Antennas Forbesii.

*Dredge*  
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra.*

Current number of observation, *840.*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Dumplings N. by N.  $\frac{1}{2}$  N.  
100 yards.*

Time of day, *10.05 am*; of tide,

State of sky, *b. c.*

Temperature of air, *67.*

" surface of water, *67. (N. 3. 42666)*

*3.3.07* " at depth of *5* fathoms, *65° (107. 65°)*

" of bottom, *61 (N. 3. 40007.)*

Depth, in fathoms, *20  $\frac{1}{2}$*

Nature of bottom, *gravel.*

Direction of ~~surface current~~ *wind N. N. E.*

Force of ~~surface current~~ *" 2.*

Direction of ~~bottom current~~ *dip*

Force of ~~bottom current~~ *dip, "*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,





*Dredg*  
TEMPERATURE RECORD.

Instrument used, *Reggelli-Zambra*

Current number of observation, *841.*

Date, *Aug. 31, 1880.*

Locality, *Narragansett Bay*

Bearings, *Rhode Island Lt., N. E. by E. 3/4 E., 7/8 mile.*

Time of day, *10.45 am.* of tide,

State of sky, *b. c.*

Temperature of air, *68.*

*n. z.*  
*40007* .. surface of water, *67.* (*n. z. 42666.*)  
.. at depth of *5* fathoms, *67* (*10 f. 65°*)  
.. of bottom, *60* (*n. z. 40007*)

Depth, in fathoms, *21.*

Nature of bottom, *gravel.*

Direction of ~~surface current~~, *wind E. N. E.*

Force of ~~surface current~~, *"* *2.*

Direction of ~~bottom current~~, *Drift* *S.*

*Dist. " 1/2 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

841.

REMARKS.

and ... ..

... ..

... ..

# TEMPERATURE RECORD.

Instrument used, *Regatta. Jambra.*

Current number of observation, *842.*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Goat Island Lt., E. N.E.*

*1/2 E., 1/2 mile.*

Time of day, *11. am.*; of tide,

State of sky, *clear.*

Temperature of air, *69.*

" surface of water, *67.* (*n. 3. 42666*)

" at depth of fathoms,

" of bottom, *67.* (*n. 3. 40007.*)

Depth, in fathoms, *8.*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind east*

Force of ~~surface current~~ *2.*

Direction of ~~bottom current~~ *Drift*

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

842

REMARKS.

# TEMPERATURE RECORD.

Instrument used, *Regatta - Zambra*

Current number of observation, *843*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay.*

Bearings, *N. end of Dyer's Island N. E. 1/2 E., 3/4 mile*

Time of day, *12 m.*; of tide,

State of sky, *clear.*

Temperature of air, *69.*

" surface of water, *69 (N. J. 42666)*

" at depth of *5* fathoms, *67 (N. J. 40007)*

" of bottom, *63* "

Depth, in fathoms, *14 1/2*

Nature of bottom, *sand.*

Direction of ~~surface~~ *wind* current, *East.*

Force of ~~surface~~ *"* current, *3.*

Direction of ~~bottom~~ *drift* current, *N.*

*dist.* " *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

843.

REMARKS.

*Asterias Forbesii*, var. *...*  
*Callinectes* *...*  
*Homarus* *...*  
*...*

*...* *...* *...*  
*...* *...* *...*  
*...* *...* *...*  
*...* *...* *...*  
*...* *...* *...*  
*...* *...* *...*  
*...* *...* *...*  
*...* *...* *...*

...

...

# TEMPERATURE RECORD.

Instrument used, *Negretti Zamboni*

Current number of observation, *844*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay,*

Bearings, *N. end of Dyer's I., S. E.  $\frac{1}{2}$  E.,  $\frac{1}{4}$  mile.*

Time of day, *12.30 P.M.*; of tide,

State of sky, *Clear*

Temperature of air, *70.*

" surface of water, *69* *(11.3. + 2666*

" at depth of *5* fathoms, *67.* *(11.3. + 0007.*

" of bottom, *68.* *"*

Depth, in fathoms, *11  $\frac{1}{2}$*

Nature of bottom, *sand*

Direction of ~~surface~~ *wind* *E.*

Force of ~~surface~~ *"* *2.*

Direction of ~~bottom~~ *drift* *N. S. W.*

*Dist. "  $\frac{1}{4}$  mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,



800.

REMARKS.

Much Laminaria, H. ob. med.  
and other sea weeds.

Salicornia, ...

... ..

Humulus Americanus, ...

Salicornia

Salicornia punctulata, ...

... ..

... ..

Rosa, ...

... ..

... ..

... ..

... ..

# TEMPERATURE RECORD.

Instrument used, *Requena-Zambra.*

Current number of observation, *845.*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Providence Light, N.  $\frac{1}{2}$  N.  $\frac{3}{4}$  mile*

Time of day, *1 P.M.*; of tide,

State of sky, *Clear.*

Temperature of air, *70.*

" surface of water, *69.* (*Th. 3. 42666.*)

" at depth of *5* fathoms, *67.* (*Th. 3. 40007.*)

" of bottom, *64.* "

Depth, in fathoms, *14  $\frac{1}{2}$*

Nature of bottom, *Gravel.*

Direction of ~~surface current~~ *wind* *N. E.*

Force of ~~surface current~~ *"* *3.*

Direction of bottom current,

Force of bottom current,

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,



Chester Lake. Dredge.

TEMPERATURE RECORD.

Instrument used, *Requetté-Jambra*

Current number of observation, *846.*

Date, *Aug. 31. 1880.*

Locality, *Narragansett Bay*

Bearings, *Providence St., N. by E.  
3/4 E., 1 1/2 miles.*

Time of day, *1.35 P.m.*; of tide.

State of sky, *Clear.*

Temperature of air, *70.*

" surface of water, *68. (N. 3. 42666)*

" at depth of *5* fathoms, *67. (N. 3. 40007.)*

" of bottom, *63.*

Depth, in fathoms, *14 1/2*

Nature of bottom, *gravel*

Direction of ~~surface~~ *wind* *N. E.*

Force of ~~surface~~ *"* *3.*

Direction of ~~bottom~~ *Drift* *E. N. E.*

*Dist. " 1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

846.

REMARKS.

Bay nearly full of sand,  
mud with broken shells  
and small stones.  
Asterias floridensis.  
Cribrella sanguinolenta  
Cancer young?  
Murex  
Callinassa thompsoni.

# TEMPERATURE RECORD.

Instrument used, *Requien-Jambra.*  
 Current number of observation, *847.*  
 Date, *Aug. 31. 1880.*  
 Locality, *Naragansett Bay.*  
 Bearings, *Half Way Rock, N.  $\frac{1}{4}$  W.,*  
*1 mile.*  
 Time of day, *2.15 P.m.*; of tide,  
 State of sky, *Clear.*  
 Temperature of air, *70.*  
 " surface of water, *68. (N. 3. 42666*  
 " at depth of *5* fathoms, *68. (N. 3. 40007.*  
 " of bottom, *62. (N. 3. 40007.*  
 Depth, in fathoms, *12  $\frac{1}{2}$*   
 Nature of bottom, *mud.*  
 Direction of ~~surface current~~, *wind E.*  
 Force of ~~surface current~~, *3.*  
 Direction of ~~bottom current~~, *Drift N. N. E.*  
*Dist. "  $\frac{1}{4}$  mile.*  
 Force of ~~bottom current~~.  
 Name of vessel,  
 To what service attached,  
 Name and rank of commanding officer,  
 Name and position of observer,

847.

## REMARKS.

The bog took in large  
 quantity of mud, but  
 the sand at lower  
 end of bay, the  
 most of contents  
 amphipods, and about  
 1000 birds in  
 numbers,  
 still in the bay.

# TEMPERATURE RECORD.

Instrument used, *Regatta-Jambra*

Current number of observation, *848*

Date, *Aug. 31, 1880.*

Locality, *Narragansett Bay,*

Bearings, *Bishop's Rock, East,  
1/2 mile.*

Time of day, *3. P.M.,* ; of tide,

State of sky, *Clear.*

Temperature of air, *69.*

" surface of water, *68. (11.3.42666,*

*h. 3. 40007.* at depth of *5* fathoms, *68° (107. 67°*

" of bottom, *62* *h. 3. 40007.*

Depth, in fathoms, *15 1/2*

Nature of bottom, *mud.*

Direction of ~~surface~~ *wind* current, *S. E.*

Force of ~~surface~~ *"* current, *3.*

Direction of ~~bottom~~ *Drift* current, *N.*

Force of ~~bottom~~ *Dist.* current, *"*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,



## REMARKS.

Many families and  
 other species  
 Homarus americanus 1.  
 Pagrus auratus 1.  
 Callinectes sapidus 1.  
 Cancer borealis  
 Alpheidae 1.  
 " vulgaria 1.

Stomatopoda  
 Stomatopoda  
 Stomatopoda  
 Pseudosquilla  
 Pseudosquilla oblongus  
 Stomatopoda  
 Physa tenuis  
 Agnospira  
 Bulimulus

*Kake Dredge*  
TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra,*

Current number of observation, *849.*

Date, *Sept. 1. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Ft. Dumpling N. N. W.  $\frac{1}{2}$  W.  
 $\frac{1}{4}$  mile.*

Time of day, *9.20* ; of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *67.*

*n. 3. 40007* surface of water, *67* (*n. 3. 42666.*)  
at depth of *5* fathoms, *67°* (*107. 66°*)  
of bottom, *63.* , *n. 3. 40007.*

Depth, in fathoms, *20.*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind* *variable*

Force of ~~surface current~~ *4* *1.*

Direction of ~~bottom current~~ *Drift* *S. W.*

*Dist.* "  *$\frac{1}{4}$  mile.*

~~Name of bottom current.~~

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

849.

REMARKS.

Sand, gravel, & lime.

Many Hydroids.

*Ascidia vulgaris* 3.

" *Ferberia* 5

*Eupagurus herpessopus* many

*Pecten sanguinolentus* (many)

*Urosalpinx*

*Ascidia* *canina*.

*Eupagurus pollicaris*.

*Urosalpinx* *canina* *canina*.

*Tarantula* *adiposus*.

*Synalpheus* *fasciatus*.

Kake Dredg-  
TEMPERATURE RECORD.

Instrument used, *Regretté-Jambon*

Current number of observation, *858.*

Date, *Sept. 1. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Fr. Dimpling. E. N. E.  
1/2 E., 1/2 mile.*

Time of day, *9.40 am.*; of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *67.*

" surface of water, *67. (N. 3. 42.666,*

*N. 3. 40.007*  
" at depth of *5* fathoms, *67° (10 f. 66°*

" of bottom, *63. (N. 3. 40.007.*

Depth, in fathoms, *14 1/2*

Nature of bottom, *shells.*

Direction of ~~surface current~~ *wind East.*

Force of ~~surface current~~ *" 2.*

Direction of ~~bottom current~~ *drift S. S. W.*

*Dist. "*  
~~Force of bottom current.~~ *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

850

REMARKS.

Sand. Large quantities of  
sand in the  
bottom of the bay, especially  
in the  
southern part.

*Radar. Dr. 17.*  
TEMPERATURE RECORD.

Instrument used, *Negretti-Zambisa*

Current number of observation, *857.*

Date, *Sept. 1. 1880.*

Locality, *Narragansett Bay.*

Bearings, *Beaver Tail Lt., S. N.  $\frac{1}{4}$  N.  
 $1\frac{3}{4}$  miles.*

Time of day, *10. am.*; of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *66.*

" surface of water, *67.* (*N. 3. + 2666.*)

" at depth of *5* fathoms, *66°* (*N. 3. 4000 f.*)

" of bottom, *66.* "

Depth, in fathoms, *12  $\frac{1}{2}$*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind*, *S. E.*

Force of ~~surface current~~ *"*, *2.*

Direction of ~~bottom current~~ *drift*, *S.*

*Dist.* *"*  
~~Force of bottom current~~ *1/4 mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

851.

REMARKS.

Much Laminaria sandar  
gravel.

Syngnathus fuscus.

Frank  
TEMPERATURE RECORD.

Instrument used, *Regretté-Zambra*

Current number of observation, *852.*

Date, *Sept. 1, 1880.*

Locality, *Narragansett Bay.*

Bearings, *Beaver Tail Light, S. S. W.  
2 1/4 W., 2 1/8 miles.*

Time of day, *10.35 am;* of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *67.*

" surface of water, *67.* (*W. 3.42666*)

" at depth of fathoms,

" of bottom, *66.* (*W. 3.40007.*)

Depth, in fathoms, *2 1/2*

Nature of bottom, *sand.*

Direction of ~~surface current~~, *Wind East.*

Force of ~~surface current~~, *1.*

Direction of ~~bottom current~~, *Drift S.*

Force of ~~bottom current~~, *1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

*Note - Mid-channels in Narragansett Bay.*



## REMARKS.

Many dead Laminaria  
 Echinocardium  
 Homarus Americanus  
 Eupagurus pollicaris.

Stenotomus argyrops.  
 Pseudopleuronectes Americanus,  
 Lophopsetta maculata.  
 Raja erinacea,  
 Prionotus Carolinus  
 Sauratogobius adspersus  
 Syngnathus fuscus.  
 Microstomus dentatus.

Trawl.  
TEMPERATURE RECORD.

Instrument used, *Regatta - Zambra*

Current number of observation, *853.*

Date, *Sept. 1, 1880.*

Locality, *Naragansett Bay.*

Bearings, *Beaver Tail Lt. S. W. by S.,  
2 miles.*

Time of day, *10.50 am*; of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *68. 67*

" surface of water, *76. N. 3. + 2666*

" at depth of fathoms,

" of bottom, *67. N. 3. 40007.*

Depth, in fathoms, *4 1/2*

Nature of bottom, *Sand.*

Direction of ~~surface~~ *main* current, *E. ast.*

Force of ~~surface~~ *"* current, *1.*

Direction of ~~bottom~~ *drift* current, *S.*

~~Force of bottom~~ *"* current, *1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

*Note - Mid channel in Narragansett Bay.*

## REMARKS.

Lamprologus  
 Homarus Americanus (100000)  
 Libinia  
 Loliopsis Reali

Lophorhynchus maculata.  
 Pseudorhynchus denticatus.  
 Pseudopleuronectes Americanus.  
 Stenotomus argyrops.  
 Cynoscion regalis  
 Sciaenops  
 Prionotus carolinus  
 Tautoglabrus adspersus.

Trawl  
TEMPERATURE RECORD.

Instrument used, *Regretté-Zambra.*

Current number of observation, *854.*

Date, *Sept. 1, 1880.*

Locality, *Narragansett Bay.*

Bearings, *Beaver Tail Lt. S. N. 1/4 S.*  
*1 3/4 miles.*

Time of day, *11.10 am*; of tide, *ebb.*

State of sky, *clear.*

Temperature of air, *69.*

" surface of water, *67. (N. 3. 2666.)*

" at depth of fathoms,

" of bottom, *67. (N. 3. 40007.)*

Depth, in fathoms, *6.*

Nature of bottom, *sand.*

Direction of ~~surface current~~ *wind S. E.*

Force of ~~surface current~~ *" 1.*

Direction of ~~bottom current~~ *drift S.*

*Dist. " 1/4 mile.*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,

*mid channel in Narragansett Bay*  
*2 Cove*

Same as above.  
*Sisymbrium* *terrestris*  
*Hemaris* *alba*

*Stenotomus argyrops*.  
*Orionotus Carolinus*.  
*Pseudorhombus dentatus*.  
*Tautoglabrus adspersus*.  
*Pseudopleuronectes americanus*  
*Lophopsetta maculata*.  
*Cynoscion regalis*.

# TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*  
 Current number of observation, *855*  
 Date, *Sept. 1, 1880.*  
 Locality, *Karraganett Bay,*  
 Bearings, *Beaver Tail Pt., S. W. by S., 2 miles.*  
 Time of day, *11.40 am.* of tide, *ebb.*  
 State of sky, *clear.*  
 Temperature of air, *70.*  
 " surface of water, *68. (N. 3. 42666*  
 " at depth of fathoms,  
 " of bottom, *68. (N. 3. 40007*  
 Depth, in fathoms, *3 1/2*  
 Nature of bottom, *sand.*  
 Direction of ~~surface~~ *wind* current, *E.*  
 Force of ~~surface~~ *wind* current, *1.*  
 Direction of ~~bottom~~ *drift.* current, *S.*  
 Force of ~~bottom~~ *drift.* current, *1/2 mile*  
 Name of vessel,  
 To what service attached,  
 Name and rank of commanding officer,  
 Name and position of observer,

# REMARKS.

*Raja erinacea*,  
*Chilichthys turgidus*,  
*Stenotomus argyrops*,  
*Pseudopleuronectes americana*,  
*Lophopsetta maculata*,  
*Syngnathus fuscus*,  
*Prionotus carolinus*.

Rake Dredge  
TEMPERATURE RECORD.

Instrument used, *Negetti-Zambra*  
Current number of observation, *856.*

Date, *Sept. 1. 1880.*

Locality, *Narragansett Bay,*

Bearings, *Beaver Tail Light.*

*S. N.  $\frac{1}{2}$  N.,  $1\frac{3}{8}$  miles.*

Time of day, *12.05 P.M.* of tide,

State of sky, *Clear.*

Temperature of air, *69.*

" surface of water, *68.* (*N.B. 42666.*)

" at depth of fathoms,

" of bottom, *67* (*N.B. 40007.*)

Depth, in fathoms, *11.*

Nature of bottom, *Gravel.*

Direction of ~~surface current~~ *Wind E.*

Force of ~~surface current~~ *" 2.*

Direction of ~~bottom current~~ *Drift S. S. E.*

Force of ~~bottom current~~ *Drift  $\frac{1}{2}$  mile*

Name of vessel,

To what service attached,

Name and rank of commanding officer,

Name and position of observer,



856.

REMARKS.

*Gynerium volkensii*, Several  
small, green, broken up  
laminar  
*Mylodon* small

# Rake Dredge

## TEMPERATURE RECORD.

Instrument used, *Regatta-Zambra*  
Current number of observation, *857*.  
Date, *Sept. 1. 1880.*  
Locality, *Nanagansett Bay.*  
Bearings, *Beaver Tail Pt., N.S. W.*  
*3/4 W., 6/10 mile.*  
Time of day, *12.35 P.M.* of tide,  
State of sky, *b. c.*  
Temperature of air, *69.*  
" surface of water, *63* (*N. 3. 42666*)  
" at depth of *10* fathoms, *66.5* (*N. 3. 40007*)  
" of bottom, *66.* "  
Depth, in fathoms, *19.*  
Nature of bottom, *sand.*  
Direction of ~~surface~~ *wind* *S. E.*  
Force of ~~surface~~ *"* *2.*  
Direction of ~~bottom~~ *drift* *S. E.*  
*Dist. "*  
~~Force of bottom current,~~ *1/4 mile.*  
Name of vessel,  
To what service attached,  
Name and rank of commanding officer,  
Name and position of observer,

857.

REMARKS.

1000 fms. deep

Large quantities, Laminaria  
Laminaria

858.

Ruthe dredge

Coarse sand broken shells  
*Cancer borealis*

$$7.30 - 67.$$

$$7.45 = 67$$